

COASTAL STORM SURVEY

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF COASTAL ENGINEERING - TOMS RIVER NJ

12:00 P.M. TUESDAY, SEPTEMBER 05, 2006



NEW JERSEY COASTLINE INCLUDING RARITAN AND DELAWARE BAYS

AFTER AN EXTENDED PERIOD OF CALM CONDITIONS THROUGHOUT THE SPRING AND EARLY SUMMER WHICH RESULTED IN HEALTHY SAND BARS AND WIDE BEACHES, TROPICAL STORM ERNESTO HAS TAKEN ITS TOLL THIS LABOR DAY WEEKEND, CAUSING IN SEVERE EROSION STATEWIDE AND LOCALIZED DAMAGE TO DUNE SYSTEMS.

THE REMNANTS OF TROPICAL STORM ERNESTO MOVED NORTHWARD FROM THE CAROLINA COAST LATE THURSDAY NIGHT AND PUSHED UP AGAINST A STRONG HIGH PRESSURE CENTERED OVER THE CANADIAN MARITIMES, RESULTING A PROLONGED PERIOD OF STORM FORCE WINDS, MODERATE COASTAL FLOODING AND POUNDING SURF ALONG THE ATLANTIC COAST OF NEW JERSEY. SUSTAINED ONSHORE WINDS EXCEEDED 40 KNOTS THROUGHOUT THE DAY ON SATURDAY AND WAVE HEIGHTS PEAKED AT OVER 20-FEET AT OFFSHORE BUOYS, CAUSING MODERATE COASTAL FLOODING ALONG THE COAST DURING THE SATURDAY AFTERNOON HIGH TIDE CYCLE.

THE BUREAU OF COASTAL ENGINEERING CONDUCTED A SURVEY OF THE NEW JERSEY COASTLINE ON TUESDAY, SEPTEMBER 5, 2006, THE CUMULATIVE RESULTS OF WHICH ARE ATTACHED TO THIS REPORT.

AREAS OF ATTENTION:

IN ABSENCE OF ANY SHORELINE PROTECTION, OCEAN COUNTY BEACHES AND DUNE SYSTEMS HAVE LOST ANY SAND THAT HAS ACCRETED OVER THE SUMMER MONTHS AND ARE NOW EXTREMELY VULNERABLE TO FUTURE STORM DAMAGE.

EMERGENCY REPAIRS NEEDED:

NONE AT THIS TIME.

FOLLOW-UP INSPECTIONS:

ADDITIONAL FOLLOW-UP INSPECTIONS WILL BE CONDUCTED ON AN AS-NEEDED BASIS.

EROSION RATING:

ATLANTIC FACING BEACHES SUSTAINED SEVERE EROSION STATEWIDE, WITH LOCALIZED DAMAGE TO DUNE SYSTEMS IN OCEAN AND ATLANTIC COUNTIES.

Perth Amboy	No significant erosion reported. Moderate coastal flooding reported.
South Amboy	No significant erosion reported. Moderate coastal flooding reported.
Old Bridge	No significant erosion reported. Minor damage to dunes reported. Moderate damage to dunes reported.
Cliffwood Beach	No significant erosion reported. Moderate coastal flooding reported.
Keyport	No significant erosion reported. Moderate coastal flooding reported.
Union Beach	No significant erosion reported. Moderate coastal flooding reported.
Keansburg	A vertical sloping cut 1' to 2' high by 25' - 50' wide was reported. Minor damage to dunes reported. Moderate coastal flooding reported.
Bayshore Floodgate	A vertical sloping cut 1' to 2' high by 25' - 50' wide was reported. Minor damage to dunes reported. Moderate coastal flooding reported.
Port Monmouth	A vertical sloping cut 1' to 2' high by 25' - 50' wide was reported. Moderate damage to dunes reported. Moderate coastal flooding reported.
Belford	A vertical sloping cut 1' to 2' high by 25' - 50' wide was reported. Minor damage to dunes reported. Moderate coastal flooding reported.
Leonardo	No significant erosion reported. Moderate coastal flooding reported.
Atlantic Highlands	No significant erosion reported. Moderate coastal flooding reported.
Highlands	No significant erosion reported. Moderate coastal flooding reported.
Sea Bright	A vertical sloping cut 4' to 6' high by 75' to 100' wide was reported. Windblown sand reported.
Monmouth Beach	A vertical sloping cut 4' to 6' high by 75' to 100' wide was reported. Windblown sand reported.
Long Branch	A vertical sloping cut 4' to 6' high by 75' to 100' wide was reported. No damage reported.
Elberon	A vertical sloping cut 4' to 5' high by 50' to 75' wide was reported. No damage reported.

Allenhurst	A vertical sloping cut 4' to 5' high by 50' to 75' wide was reported. No damage reported.
Deal	A vertical sloping cut 4' to 5' high by 25' - 50' wide was reported. No damage reported.
Loch Arbour	A vertical sloping cut 4' to 5' high by 50' to 75' wide was reported. No damage reported.
Asbury Park	A vertical sloping cut 2' to 3' high by less than 25' wide was reported. Windblown sand reported.
Ocean Grove	A vertical sloping cut 2' to 3' high by less than 25' wide was reported. Windblown sand reported.
Bradley Beach	A vertical sloping cut 3' to 4' high by 25' - 50' wide was reported. Windblown sand reported.
Avon by the Sea	A vertical sloping cut 2' to 3' high by 25' - 50' wide was reported. Windblown sand reported.
Belmar	A vertical sloping cut 3' to 4' high by 25' - 50' wide was reported. Windblown sand reported.
Spring Lake	A vertical sloping cut 3' to 4' high by 25' - 50' wide was reported. Windblown sand reported.
Sea Girt	A vertical sloping cut 3' to 5' high by 50' to 75' wide was reported. Windblown sand reported.
Manasquan	A vertical sloping cut 3' to 5' high by 50' to 75' wide was reported. Windblown sand reported. Moderate coastal flooding reported.
Point Pleasant	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Bay Head	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Mantoloking	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Lavallette	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Severe damage to dunes reported. Windblown sand reported.
Bricktown	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Ortley Beach	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.

Seaside Heights	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Seaside Park	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Island Beach State Park	A vertical sloping cut 4' to 5' high by 75' to 100' wide was reported. Windblown sand reported.
Barnegat Light	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Loveladies	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Harvey Cedars	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
North Beach	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Surf City	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Ship Bottom	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Long Beach Township	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Brant Beach	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Beach Haven	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Holgate	A vertical sloping cut 2' to 4' high by 50' to 75' wide was reported. Windblown sand reported.
Brigantine	A vertical sloping cut 1' to 3' high by 25' - 50' wide was reported. No damage reported.
Atlantic City	A vertical sloping cut 3' to 4' high by 50' to 75' wide was reported. Moderate damage to dunes reported. Windblown sand reported.
Ventnor	A gentle sloping cut 1' to 2' high by 25' - 50' wide was reported. No damage reported.
Margate	A gentle sloping cut 1' to 2' high by 25' - 50' wide was reported. No damage reported.

Longport	A gentle sloping cut 2' to 3' high by 50' to 75' wide was reported. No damage reported.
Ocean City	A vertical sloping cut 4' to 6' high by 75' to 100' wide was reported. Severe damage to dunes reported.
Strathmere	A vertical sloping cut 2' to 3' high by 50' to 75' wide was reported. Moderate damage to dunes reported. Timber Groins exposed along north end.
Whale Beach	A gentle sloping cut 2' to 3' high by 50' to 75' wide was reported. Geotubes exposed.
Sea Isle City	A gentle sloping cut 2' to 3' high by 50' to 75' wide was reported. Moderate damage to dunes reported.
Avalon	A vertical sloping cut 2' to 4' high by 25' - 50' wide was reported. No damage reported.
Stone Harbor	A gentle sloping cut 2' to 3' high by 50' to 75' wide was reported. No damage reported.
North Wildwood	A gentle sloping cut 3' to 4' high by 75' to 100' wide was reported. Windblown sand reported. Minor property damage reported.
Wildwood Crest	A gentle sloping cut 3' to 5' high by 100' - 150' wide was reported. Minor coastal flooding reported.
Wildwood	A gentle sloping cut 3' to 5' high by 100' - 150' wide was reported. Minor coastal flooding reported.
Cape May City	A gentle sloping cut 1' to 3' high by 25' - 50' wide was reported. Minor damage to dunes reported. Damage to dune fencing reported.
Cape May Point State Park	A gentle sloping cut 1' to 2' high by 25' - 50' wide was reported. No damage reported.
Cape May Point Borough	A vertical sloping cut 1' to 2' high by 25' - 50' wide was reported. No damage reported.
Delaware Bay Area	No significant erosion reported. Minor coastal flooding reported.